

## REMARKS

Reconsideration of the application identified in caption, pursuant to and consistent with 37 C.F.R. §1.111 and in light of the remarks which follow, is respectfully requested.

At the outset, Applicants note that claims 31-35, which are currently pending in the present application, have not been rejected in the outstanding Official Action. Accordingly, indication that claims 31-35 contain allowable subject matter is believed to be in order, and such action is respectfully requested.

In the Official Action, claims 1-10, 17, 21-25 and 28 stand rejected under 35 U.S.C. §101. Withdrawal of this rejection is respectfully requested for at least the following reasons.

The Patent Office has taken the position that in claim 1, the recited step of determining does not necessarily require the use of the measurement device. See Official Action at page 3. Applicants respectfully but strenuously disagree with the Examiner's assertion.

In claim 1, the recited measurement device is employed in the determining step. In this regard, claim 1 recites a method for an automatic determination of a physical, technical method and/or colloidal chemistry parameter using a measurement device, by a determination of an attenuation of radiated waves during a segregation of a monodisperse or polydisperse dispersion sample. Claim 1 further recites during the segregation, repeatedly determining and recording momentary transmission values  $I_T(t, r)$ , and optionally scattering values  $I_S(t, r)$ , characterizing a current segregation status of the sample. The "repeatedly determining and recording" is conducted during segregation. Further, the automatic determination

using the measurement device, is by a determination of an attenuation of radiated waves during a segregation. From such recitations, it is apparent that the measurement device is employed in the determining step.

As such, claim 1 is in compliance with the provisions of 35 U.S.C. §101. Accordingly, for at least the above reasons, withdrawal of the §101 rejection is respectfully requested.

Claims 11, 14, 29 and 30 stand rejected under 35 U.S.C. §102(b) as being anticipated by International Publication No. WO 97/16713 (*WO '713*). The Patent Office has relied on a machine translation of the corresponding DE publication. Withdrawal of this rejection is respectfully requested for at least the following reasons.

It is well established that "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. [Emphasis added.]" *Verdegaal Bros. v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). For an anticipation to exist, "[t]he identical invention must be shown in as complete detail as is contained in the . . . claim." *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

In the present case, *WO '713* does not disclose each feature recited in independent claim 11 and 29, and as such fails to constitute an anticipation of such claims. For example, *WO '713* does not disclose a spectrometric measurement device with a source producing monochromatic parallel radiation, which measures radiation intensity scattered or transmitted by a dispersion sample over a partial or entire length of the sample, simultaneously for multiple positions of the sample, as recited in claim 11. *WO '713* does not disclose that the spectrometric measurement

device measures radiation intensity simultaneously for multiple positions of the sample. In addition, WO '713 does not disclose during segregation of the sample, detecting transmission values  $I_T(t, r)$  and/or scattering values  $I_S(t, r)$  of the sample, simultaneously for multiple positions  $r$ , as recited in claim 29.

Concerning such claimed subject matter, the Patent Office has cited page 7, lines 3-8 and Fig. 1, col. 1 of WO '713. See Official Action at pages 4-6. In this regard, the portion of the DE machine translation relied on by the Patent Office which corresponds to page 7, lines 3-8 of WO '713, is reproduced below:

In the case of polydisperse systems, a certain volume is the - if necessary prediluted - measured sample placed into a measuring vessel and record the additional time change during the separation in the highly diluted solution as a function of radial position. Then a programmatic implementation of this system of equations describing demixing. By comparing the experimental and theoretical modeling, the total concentration, the fractional volume concentrations and particle size distribution can be determined.

Such disclosure of WO '713 has no mention of a spectrometric measurement device which measures radiation intensity scattered or transmitted by a dispersion sample over a partial or entire length of the sample, **simultaneously for multiple positions of the sample**, as recited in claim 11. Further, there is no disclosure of detecting transmission values  $I_T(t, r)$  and/or scattering values  $I_S(t, r)$  of the sample, **simultaneously for multiple positions  $r$** , as recited in claim 29.

Concerning Fig. 1, col. 1 of WO '713, Applicants note that such disclosure relates to the determination of the position of the sediment/plasma interface and filling height, and the calculation of the height of the plasma column. As can be seen from the transmission profile of Fig. 1, this disclosure does not relate at all to characterizing a segregation status of the sample from transmission values and/or

scattering values. Rather, in such disclosure, *WO '713* is concerned with calculating the height of the plasma column.

For at least the above reasons, *WO '713* fails to constitute an anticipation of independent claims 11 and 29. Accordingly, withdrawal of the above §102(b) rejection is respectfully requested.

Claim 12 stands rejected under 35 U.S.C. §103(a) as being obvious over *WO '713*, in view of allegedly admitted prior art and U.S. Patent No. 3,932,131 (*Rolfo-Fontana*). Claim 13 stands rejected under 35 U.S.C. §103(a) as being obvious over *WO '713*, in view of U.S. Patent No. 5,638,172 (*Alsmeyer et al*). Claims 15 and 16 stand rejected under 35 U.S.C. §103(a) as being obvious over *WO '713*, in view of U.S. Patent No. 5,095,451 (*Allen*).

Claims 12, 13, 15 and 16 directly or indirectly depend from independent claim 11. The deficiencies of *WO '713* with respect to claim 11 are discussed above, and the secondary applied documents (*Rolfo-Fontana*, *Alsmeyer et al* and *Allen*) fail to cure such deficiencies of *WO '713*. Accordingly, withdrawal of the above rejections is respectfully requested.

Claims 1-9, 17, 19-26 and 28 stand rejected under 35 U.S.C. §103(a) as being obvious over *WO '713*, in view of U.S. Patent No. 3,997,845 (*Wegstedt*). Claim 26 stands rejected under 35 U.S.C. §103(a) as being obvious over *WO '713* and *Wegstedt*, and further in view of U.S. Patent Application Publication No. 2005/0025819 (*Onyuksel et al*). Withdrawal of the above rejections is respectfully requested for at least the following reasons.

*WO '713* does not disclose or suggest each feature recited in independent claim 1. For example, *WO '713* does not disclose or suggest during the segregation,

repeatedly determining and recording momentary transmission values  $I_T(t, r)$ , and optionally scattering values  $I_S(t, r)$ , characterizing a current segregation status of the sample using waves radiated with intensity values  $I_o(t, r)$  as a function of a position  $r$  within the sample at a time  $t$ , for one or more wavelengths over at least a partial section of the sample, simultaneously for multiple positions  $r$ , as recited in claim 1.

Concerning such claimed subject matter, the Patent Office has cited page 7, lines 3-8 and Fig. 1, col. 1 of *WO '713*. See Official Action at page 11. However, such disclosures of *WO '713* do not relate to characterizing a current segregation status of the sample. Nor do such disclosures relate to repeatedly determining and recording momentary transmission values  $I_T(t, r)$ , and optionally scattering values  $I_S(t, r)$ , for one or more wavelengths over at least a partial section of the sample, simultaneously for multiple positions  $r$ , as recited in claim 1.

*Wegstedt* and *Onyuksel et al* fail to cure the above-described deficiencies of *WO '713*. The Patent Office has relied on *Wegstedt* for teaching a method of calculating an extinction profile. See Official Action at page 13. *Onyuksel et al* has been relied on for disclosing methods for the delivery of compounds that are insoluble or nearly insoluble in an aqueous solution wherein the sample is prepared by centrifugation. See Official Action at page 25. Even if *Wegstedt* and *Onyuksel et al* would have been combined with *WO '713* in the manner suggested by the Patent Office, the resulting combination nevertheless fails to disclose or suggest during the segregation, repeatedly determining and recording momentary transmission values  $I_T(t, r)$ , and optionally scattering values  $I_S(t, r)$ , characterizing a current segregation status of the sample using waves radiated with intensity values  $I_o(t, r)$  as a function of a position  $r$  within the sample at a time  $t$ , for one or more wavelengths over at least a

partial section of the sample, simultaneously for multiple positions r, as recited in claim 1.

For at least the above reasons, it is apparent that independent claim 1 is non-obvious over the applied documents. Accordingly, withdrawal of the §103(a) rejections is respectfully requested.

The dependent claims are allowable at least by virtue of their direct or indirect dependence from one of the independent claims. Thus, a detailed discussion of the additional distinguishing features recited in the dependent claims is not set forth at this time.

From the foregoing, further and favorable action in the form of a Notice of Allowance is believed to be next in order, and such action is earnestly solicited.

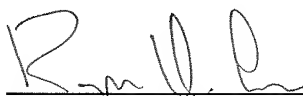
If there are any questions concerning this paper or the application in general, the Examiner is invited to telephone the undersigned.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

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